

## **Mission Support (MS) Program Descriptions**

### **ENERGY EFFICIENCY & WATER CONSERVATION (EEWC)**

**Target Audience:** Energy efficiency and water conservation professionals, including scientists and facility engineers.

**Prerequisites:** Experienced professionals in Grade GS-11 through GS-15 recommended.

**Format:** 4-day program presented by industry experts using discussions, studies, shared experiences and best practice scenarios.

**Program Overview:** Provides the basic content to improve NASA's energy efficiency and water conservation programs by sharing and understanding the best practices of energy efficiency and water conservation. The program is designed to equip participants with the knowledge of how to leverage outside resources to finance energy projects such as utility rebate programs, shared energy savings contracts, renewable energy practices, energy service companies (ESCOs), and Federal Energy Management Program (FEMP). In addition, the program educates participants on how to use metrics and lifecycle cost analysis to present energy efficiency and water conservation projects to senior management for consideration with an emphasis on the management process.

### **RELIABILITY CENTERED BUILDING & EQUIPMENT ACCEPTANCE (RCB&E)**

**Target Audience:** Design engineers, Program and Project Managers, construction managers and inspectors, QC and QA staff, and NASA research staff.

**Prerequisites:** Familiarity with facility and equipment acceptance helpful.

**Format:** 2-day program presented by industry experts using discussions, case studies, and shared experiences.

**Program Overview:** Day one focuses on Reliability Centered Maintenance (RCM) and Predictive Testing and Inspection (PT&I). The definition and specification of enhanced acceptance criteria provide tremendous benefits in discovering and eliminating latent defects prior to the acceptance of contractor equipment. The course provides a grounding in RCM principles and their role in facilities and equipment acceptance; failure characteristics, FMEA and RCM economic benefits; and relative cost vs. benefit using PT&I during acceptance. Discussions and demonstrations are conducted on various technologies addressed in the *NASA Reliability Centered Building and Equipment Guide* including technical information and value associated with the technology, cost, and required level of expertise. Live hands-on demonstrations are included. Day two includes workshop case studies and results presentations for four areas: foundations and structural elements; steam and heat transfer associated elements; electrical elements; and mechanical/hydraulic elements.

## SUSTAINABLE DESIGN (FACILITIES)

**Target Audience:** Program and Project Managers, scientists and facility engineers.

**Prerequisites:** Experienced professionals in Grade GS-11 through GS-15 recommended.

**Format:** 4-day program presented by a team of NASA and industry experts using lectures, group discussions, shared experiences and best practice scenarios.

**Program Overview:** As an emerging area of study, sustainability is an approach based refocusing, fine-tuning and realigning existing practices, policies and efforts to better align NASA's activity with four system conditions detailed in the course to become better environmental stewards. Two world experts on sustainability, Brian Nattrass and Mary Altomare, will give the first six hours of training in a combined session with the participants of the Environmental Considerations in Program and Project Management course and the Energy, Efficiency and Water Conservation course, which will be running simultaneously. Other instructors include experts from GRC, JSC, GSFC, HQ and NASA consultants.

**Information:** Registration – contact your Center Training Office. For additional information contact RGI at 703-820-4900 or [rgiinc@erols.com](mailto:rgiinc@erols.com).